

Infoblox Installation Guide

For the Infoblox-550-A, -1050-A, -1550-A, and -1552-A Appliances

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Product Information

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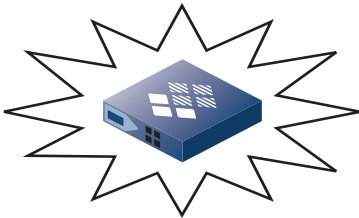
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Introduction

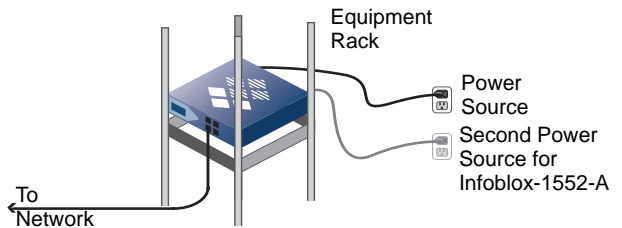
This guide provides an overview of Infoblox-550-A, -1050-A, -1550-A, and -1552-A network appliances that ship with NIOS 5.1r1-4 and later, and explains how to install and configure them. For information about the compatible software releases, refer to the Knowledge Base (KB) article 13272 for details. For the most current version of the KB article, visit <http://www.infoblox.com/en/support/support-center-login.html>.

Figure 1 Tasks in This Guide

- 1 Learn about the Infoblox appliances.
"Introduction" on page 3



- 2 Install appliances.
"Installing an Appliance" on page 11



- 3 Access appliances.
"Accessing the Appliance" on page 15



PRODUCT OVERVIEW

The Infoblox network services appliance provides reliable, scalable, and secure core network services including DNS (Domain Name System), DHCP (Dynamic Host Configuration Protocol), IPAM (IP Address Management), IF-MAP, and more. The integrated Infoblox approach combines the simplicity of appliances with the power of advanced distributed database technology to control and automate services while achieving availability, manageability, visibility, and control unparalleled by conventional solutions based on legacy technologies. You can configure and manage the Infoblox-550-A, -1050-A, -1550-A, and -1552-A through an easy-to-use Infoblox GUI that works seamlessly in Windows, Linux, and Mac environments using standard web browsers.

The Infoblox appliances are RoHS and WEEE compliant, and their hardware meets the mechanical requirements for FIPS 140-2 compliance.

HARDWARE COMPONENTS

Infoblox-550-A, -1050-A, -1550-A, and -1552-A appliances are 1-U platforms that you can easily mount in a standard equipment rack using the mounting brackets and bolts that ship with each appliance. The front panel components include the LCD (liquid crystal display) panel and navigation buttons, communication ports, and indicator lights. The back panel components include the power connector and switch, fan, air vent, and the model and serial number label.

Front Panel

The front panel is identical on Infoblox-550-A, -1050-A, -1550-A, and -1552-A appliances.

The panel components are shown in [Figure 2](#) and described in [Table 1](#). For explanations of the Ethernet port LEDs, and console and Ethernet port connector pin assignments, see [Ethernet Port LEDs](#) on page 6 and [Connector Pin Assignments](#) on page 6.

Figure 2 Infoblox Appliance, Front View

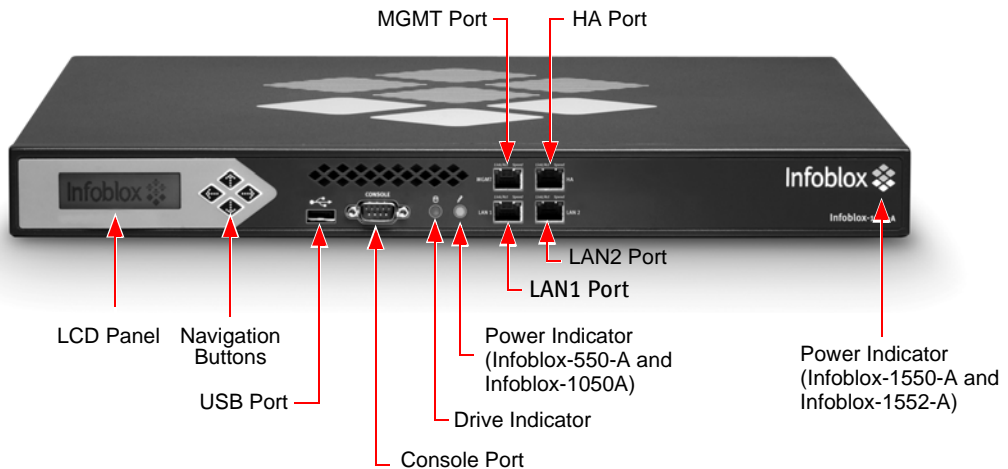


Table 1 Front Panel Components

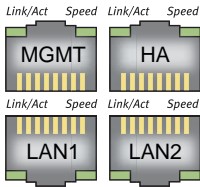
Component	Description
LCD Panel	An LCD screen that displays HA (high availability) status, network settings, software version number, hardware serial number, and software licenses. You can view and configure the IP address, netmask, and gateway for the LAN1 port.

Component	Description
Navigation Buttons	Buttons that allow you to enter the IP address, subnet mask, and gateway of the LAN1 port through the LCD. Use the Up and Down arrow buttons to specify numbers and the Left and Right buttons to navigate across digits. You must specify whether to save input (OK) or discard it (CNCL). Selecting CNCL at any time returns you to the previous entry. Entering OK on the third screen returns you to the system status screen.
USB Port	Reserved for future use.
Console Port	<p>A male DB-9 serial port for a console connection to change basic configuration settings and view basic system functions through the CLI (command line interface). Use the serial cable and connection adapters that ship with the appliance to make a console connection to this port.</p> <p>Only a properly grounded USB-to-Serial dongle is allowed to connect to the serial console port. If the dongle is connected to a laptop, this laptop must be grounded properly as well. Failure to do so may result in damage to the serial console port of the Infoblox appliance. Infoblox is not responsible for such damage.</p>
Drive Indicator	An LED that flashes green to indicate when the hard drive processes data.
Power Indicator	An LED that glows green when there is power to the appliance. When it is dark, the appliance is not receiving power. For the Infoblox-1552-A, the power indicator on the front panel is green if at least one power supply has power and is dark if neither power supply has power.
MGMT Port	A 10/100/1000-Mbps gigabit Ethernet port that you can use for appliance management or DNS service. You can enable the MGMT port and define its use through the GUI after the initial setup.
HA Port	A 10/100/1000-Mbps gigabit Ethernet port through which the active node in an HA (high availability) pair connects to the network using a VIP (virtual IP) address. HA pair nodes also use their HA ports for VRRP (Virtual Router Redundancy Protocol) advertisements.
LAN1 Port	A 10/100/1000-Mbps gigabit Ethernet port that connects a NIOS appliance to the network. You must use the LAN1 port to set up the appliance initially. It handles all traffic if you do not enable the MGMT and LAN2 ports. The passive node in an HA pair uses this port to synchronize the database with the active node.
LAN2 Port	A 10/100/1000-Mbps gigabit Ethernet port that connects a NIOS appliance to the network. The LAN2 port is not enabled by default. You can enable the LAN2 port and define its use through the GUI after the initial setup.

Ethernet Port LEDs

To see the link activity and connection speed of an Ethernet port, you can look at its Link/Act and Speed LEDs. [Figure 3](#) shows the status the LEDs convey through their color and illumination (steady glow or blinking).

Figure 3 LEDs



Label	Color	Port Status
Link/ Act	Steady Green	Link is up but inactive
	Blinking Green	Link is up and active
	Dark	Link is down
Speed	Steady Amber	1000 Mbps
	Steady Green	100 Mbps
	Dark	10 Mbps

Connector Pin Assignments

An Infoblox appliance has three types of ports on its front panel:

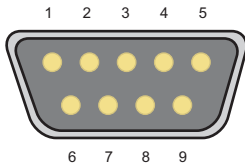
- USB port (reserved for future use)
- Male DB-9 console port
- RJ-45 10Base-T/100Base-T/1000Base-T auto-sensing gigabit Ethernet ports

The DB-9 and RJ-45 connector pin assignments are described in [Figure 4](#). The DB-9 pin assignments follow the EIA232 standard. To make a serial connection from your management system to the console port, use the RJ-45 rollover cable and two female RJ-45-to-female DB-9 adapters that ship with the appliance. The RJ-45 pin assignments follow IEEE 802.3 specifications. All Infoblox Ethernet ports are auto-sensing and automatically adjust to standard straight-through and cross-over ethernet cables.

10Base-T Ethernet and 100Base-T fast Ethernet use the same two pairs of wires. The twisted pair of wires connecting to pins 1 and 2 transmit data, and the twisted pair connecting to pins 3 and 6 receive data. For 1000Base-T connections, all four twisted-pair wires are used for bidirectional traffic.

Figure 4 Connector Pin Assignments

Male DB-9 Console Port

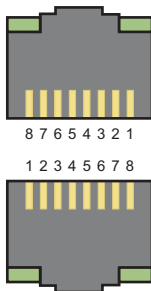


(Looking into the console port on an Infoblox appliance)

DB-9 Connector Pin Assignments

Pin	Signal	Direction
1	(not used)	
2	Receive	Input
3	Transmit	Output
4	DTE Ready	Output
5	Ground	—
6	DCE Ready	Input
7	RTS (Request to Send)	Output
8	CTS (Clear to Send)	Output
9	(not used)	

RJ-45 Ethernet Ports



(Looking into RJ-45 ethernet ports on an Infoblox appliance)

RJ-45 Connector Pin Assignments

Pin	10Base-T 100Base-T Signal	1000Base-T Signal	T568A Straight-Through Wire Color	T568B Straight-Through Wire Color
1	Transmit +	BI_DA+	White/Green	White/Orange
2	Transmit -	BI_DA-	Green	Orange
3	Receive +	BI_DB+	White/Orange	White/Green
4	(not used)	BI_DC+	Blue	Blue
5	(not used)	BI_DC-	White/Blue	White/Blue
6	Receive -	BI_DB-	Orange	Green
7	(not used)	BI_DD+	White/Brown	White/Brown
8	(not used)	BI_DD-	Brown	Brown

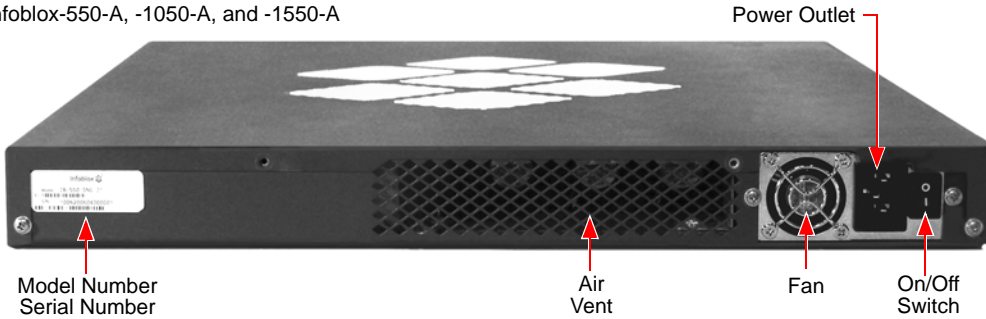
Legend: BI_D = bidirectional; A, B, C, D = wire pairings

Rear Panel

Figure 5 shows the rear panel components on Infoblox-550-A, -1050-A, -1550-A, and -1552-A appliances.

Figure 5 Infoblox Appliances, Rear View

Infoblox-550-A, -1050-A, and -1550-A



Infoblox-1552-A **Note:** The label with the model and serial numbers is on the underside of the Infoblox-1552-A.

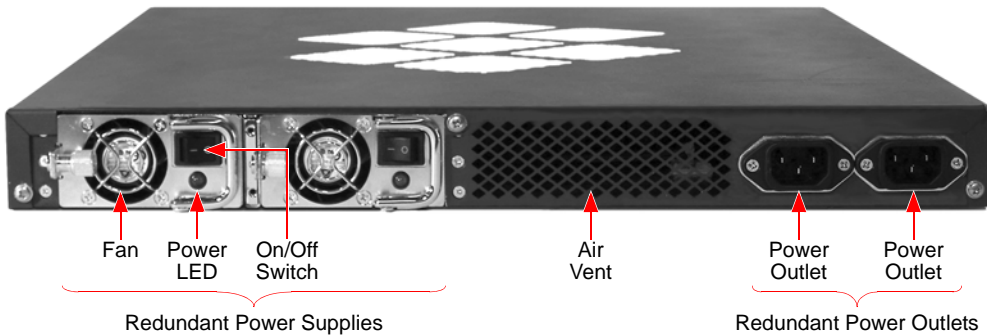


Table 2 Rear Panel Components

Component	Description
Model Number	An identifier of the hardware model type and software type.
Serial Number	The serial number of the appliance. Use it to register the appliance to obtain software upgrades and technical support services.
Air Vent	An air vent that allows warm air to flow out of the appliance. Do not obstruct.
Fan	A fan to help maintain optimum operating temperature. Do not obstruct.
Power Outlet	An IEC C-14 chassis plug for connecting the appliance to a standard AC power source.
On/Off Switch	A power switch to turn the power supply of the appliance on and off.
Power LED	An LED that glows green when a power supply has power. It is dark when it does not.

SYSTEM, ENVIRONMENTAL, AND POWER SPECIFICATIONS

System specifications describe the physical characteristics of each appliance. Environmental specifications describe the temperature and moisture limits it can withstand. Power specifications describe the electrical range within which the appliance circuitry can operate.

System Specifications

- **Form Factor:** 1-U rack-mountable appliance
- **Dimensions:**
 - Infoblox-550-A, -1050-A, and -1550-A: 1.75” H x 17.5” W x 15” D (4.45 cms H x 43.82 cms W x 38.1 cms)
 - Infoblox-1552-A: 1.75” H x 17.5” W x 21.5” D (4.45 cms H x 43.82 cms W x 55 cms)
 - Form Factor: 1-U rack-mountable appliance
- **Weight:**
 - Infoblox-550-A, -1050-A, and -1550-A: Approximately 13 pounds (5.9 kg)
 - Infoblox-1552-A: Approximately 20 pounds (9.07 kg)
- **Ethernet Ports:** MGMT, HA, LAN1, LAN2 – auto-sensing 10Base-T/100Base-T/1000Base-T
- **Serial Port:** DB-9 (9600/8n1, Xon/Xoff)
- **LCD Panel:** LCD (liquid crystal display) with input buttons

Environmental Specifications

- **Operating Temperature:** 35 to 95 degrees F (-0 to 35 degrees C)
- **Storage Temperature:** -40 to 112 degrees F (-40 to 50 degrees C)
- **Relative Humidity:** 5% to 95%, relative humidity (non-condensing)

Electrical Power Specifications

- Infoblox-550-A, -1050-A, and -1550-A:
 - **Input Voltage**
 - U.S.: 100 – 240 VAC switchable, 47 – 63 HZ, 3 A
 - Europe: 208 – 265 VAC switchable, 47 – 63 HZ, 2 A
 - **Output Power:** 250 watts
- Infoblox-1552-A:
 - **Input Voltage**
 - U.S.: 100 – 240 VAC switchable, 47 – 63 HZ, 4 A, redundant, dual input
 - Europe: 208 – 265 VAC switchable, 47 – 63 HZ, 2 A, redundant, dual input
 - **Output Power:** 250 watts each

- Power plug and cable specifications by region:

Region	Plug Type	Cable Type	Max Power Rating	Max Temperature Rating
North America	NEMA5-15P 3-prong male plug	VCTF 3C 18 AWG	7A, 125 V	75° C
Japan	NEMA5-15P 3-prong male plug	VCFI 3G	12A, 125 V	60° C
Europe	CEE7 standard VII 2-prong male plug	H05VV-F	6A, 250 V	70° C
United Kingdom	LP-60L 3-prong male plug with fuse	H05VV-F	10A, 250 V	70° C
China	RVV 300/ 500 3C X 1.00mmSQ	IEC 320 C 13/ GB2099.1 G B1002	10A, 250V	70° C
Taiwan	VCTF 3x1.25mm 70° C	IEC-60320-C13 (BME)/ BLACK-ICC	10A, 125V	70° C
Australia New Zealand	RVV 300/500 3C X 1.00mmSQ	IEC 320 C13/ GB2099.1 GB1002	10A, 250V	70° C
India South Africa	1.0/3 H05VVF3 70° C	IEC-320 C-13/BS 546SABS	10A, 250V	70° C

Installing an Appliance

Follow these instructions to rack mount the appliance, connect it to a power source, and cable it to a network. However, before proceeding, review the *Infoblox Safety Guide* and follow the necessary precautions.

RACK MOUNTING

The appliance mounts into a standard 19" (48 cms) equipment rack. In addition to the screws and brackets that ship with the product, you also need a screwdriver with a cross-headed tip.

Attach the brackets to the appliance, and mount it to an equipment rack.

1. Remove the four screws that ship attached to the left and right sides of the appliance—two screws per side.
 2. Remove the pair of brackets from the accessory kit that also ships with the appliance.
 3. Position one bracket so that the two holes in the bracket align with two of the holes on one side of the appliance.
-

Note: There are five evenly spaced holes on each side of the appliance. You can secure the brackets to any two adjacent holes so that you can mount the appliance more or less deeply in the rack.

4. Secure the bracket to the appliance with two of the screws that you removed previously.
 5. Secure the second bracket in the same position on the other side of the appliance.
 6. Attach the brackets to the equipment rack using the screws from the accessory kit.
-

POWERING THE APPLIANCE

Use the power cable that ships with the Infoblox appliance to connect it to a power source.

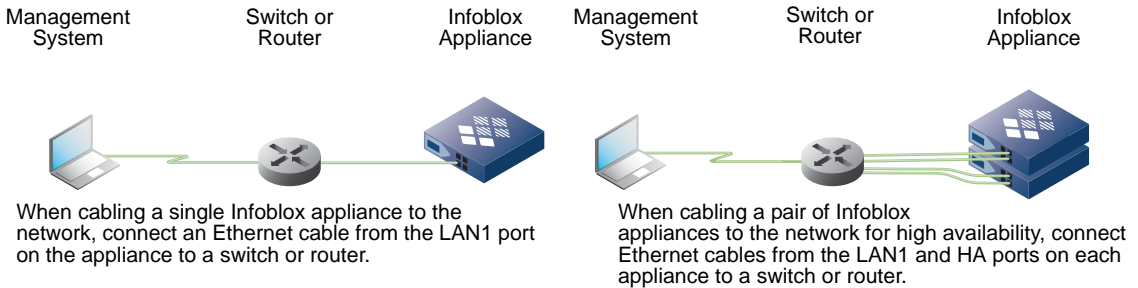
1. Make sure that the power switch on the Infoblox-550-A, -1050-A, and -1550-A is turned off. For the Infoblox-1552-A, make sure that both power switches are off.
2. For the Infoblox-550-A, -1050-A, and -1550-A, connect a power cable between the power connector on the back of the appliance and a properly grounded and rated power circuit that meets the provisions of the current edition of the National Electrical Code, or other wiring rules that apply to your location. Make sure that the outlet is near the appliance and is easily accessible.
For the Infoblox-1552-A, use both power cables to connect it to separate power circuits, if possible. If one power circuit fails, the other might still be operative.
3. For the Infoblox-550-A, -1050-A, and -1550-A, turn on the power switch. For the Infoblox-1552-A, turn on both power switches.

CABLING THE APPLIANCE TO A NETWORK

Use the Ethernet cables that shipped with the product to connect the appliance to the network.

1. Connect an Ethernet cable from the LAN1 port on the appliance to your network switch or router.
2. If you want to connect your appliance for HA (high availability), connect the HA ports on both appliances to a switch on your network. The VIP (Virtual IP), LAN1, and HA port addresses must be on the same subnet and must be unique for that subnet.

Figure 1 *Cabling a Single Appliance and an HA Pair to a Network*



Note: By default, an Infoblox appliance automatically negotiates the optimal connection speed and transmission type (full or half duplex) on the physical links between its LAN1, LAN2, HA, and MGMT ports and the Ethernet ports on a connecting switch. If the two appliances fail to auto-negotiate the optimal settings, see the *Infoblox Administrator Guide* for steps you can take to resolve the problem.

3. To ensure that VRRP (Virtual Router Redundancy Protocol) works properly, configure the following settings at the port level for all the connecting switch ports (HA, LAN1, and LAN2):
 - Spanning Tree Protocol: Disable. For vendor specific information, search for “HA” in the Infoblox Knowledge Base system at <http://www.infoblox.com/en/support/support-center-login.html>
 - Trunking: Disable
 - EtherChannel: Disable
 - IGMP Snooping: Disable
 - Port Channeling: Disable
 - Speed and Duplex settings: Match these settings on both the Infoblox appliance and switch
 - Disable other dynamic and proprietary protocols that might interrupt the forwarding of packets
4. Use the Infoblox GUI to access the Infoblox appliance from a management system. Through the GUI, you can set up and administer the appliance. For management system requirements and access instructions, see [Accessing the Appliance](#) on page 15.

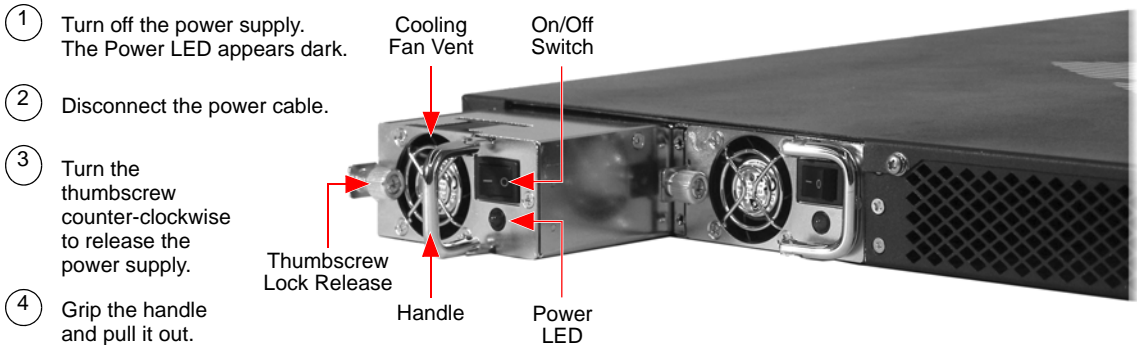
CHANGING POWER SUPPLIES (INFOBLOX-1552-A)

The Infoblox-1552-A supports—and ships with—two redundant, auto-switching AC power supplies. The power supplies are hot-swappable, so you can remove or replace one power supply without interrupting appliance operations and network services.

When the Infoblox-1552-A contains two functioning power supplies, they share the power load equally. If one power supply fails, the other assumes the full load automatically and the appliance sends a system alarm. Although the Infoblox-1552-A can run with only one power supply, it is advisable to install two. This practice minimizes the chance of system failure due to an individual power supply failure.

Each AC power supply weighs about three pounds (1.36 kg). The faceplate contains a power LED, a power switch, and a cooling fan vent. Each power supply links to a dedicated male power outlet.

Figure 2 Removing the AC Power Supply



The LED for a power supply glows green to indicate that the power supply is fully seated in the bay, is powered on, and is functioning properly. The LED appears dark to indicate the power supply is not fully seated, is not turned on, or has failed.

To replace a power supply:

1. Turn off the power supply that you want to replace. (Keep the power for the other supply on so that the appliance can continue providing service.)
2. Disconnect the power cable from the outlet for this power supply.
3. Turn the thumbscrew lock release counter-clockwise to release the power supply.
4. Swivel the handle outward, grip the handle, and pull the power supply straight out.
5. Position the new power supply in the bay, and push it forward until it is fully seated against the back plane.
6. Tighten the thumbscrew lock release to lock the power supply in place, and fold back the handle.
7. Reconnect the power cable.
8. Turn on the power supply. If it is fully seated, powered on, and operating properly, the LED glows green.

Accessing the Appliance

The management system is the computer from which you configure and monitor the Infoblox appliance. You can access the appliance from the management system remotely across an Ethernet network or directly through a serial cable.

After completing the steps in [Cabling the Appliance to a Network](#) on page 12, you can make an HTTPS connection to the appliance and access the Infoblox GUI using one of the supported browsers.

Alternatively, you can make an SSHv2 connection and access the CLI through an SSHv2 client. You can also access the CLI by connecting a serial cable directly from the console port of a management system to the console port on the appliance, and then using a terminal emulation program.

The management system must meet the following requirements to operate an Infoblox appliance.

Table 1 *Software and Hardware Requirements for the Management System*

Management System Software Requirements	Management System Hardware Requirements
<p>Infoblox GUI ACCESS</p> <ul style="list-style-type: none">• Microsoft® Internet Explorer® 8.0+ or Mozilla Firefox 3.5 + on Microsoft Windows 7®• Microsoft Internet Explorer® 7.0+ and 8.0+ or Mozilla Firefox 3.5 + on Microsoft Windows Vista®• Microsoft Internet Explorer® 7.0+ and 8.0+ or Mozilla Firefox 3.5 + on Microsoft Windows XP® (SP2+)• Mozilla Firefox 3.5 + on Red Hat® Enterprise Linux® or Fedora Core 8 and higher• Safari 3.2+ and 4.x+ on Apple Mac OS® Xv10.5 and higher <p>CLI ACCESS</p> <ul style="list-style-type: none">• Secure Socket Shell (SSH) client that supports SSHv2• Terminal emulation program, such as minicom or Hilgraeve Hyperterminal®.	<ul style="list-style-type: none">• Minimum System: 500 MHz CPU with 256 MB RAM available to the Infoblox GUI, and 256 Kbps connectivity to an Infoblox appliance• Recommended System: 1 GHz (or higher) CPU with 512 MB RAM available for the Infoblox GUI, and network connectivity to an Infoblox appliance• Monitor Resolution: Minimum: 1024 x 768 Recommended: 1280 x 800 or better

CONNECTING TO THE APPLIANCE

Before you can configure the Infoblox appliance through the Infoblox GUI, you must be able to make a network connection to it. You must use the LAN1 port to connect to the appliance. The default network settings of the LAN1 port are 192.168.1.2/24 with a gateway at 192.168.1.1 (the HA, MGMT, and LAN2 ports do not have default network settings). To change these settings to suit your network, use either the LCD or the console port.

LCD

The Infoblox appliance has an LCD and navigation buttons on its front panel. At startup, the Infoblox logo appears in the LCD on the front panel of the appliance. Then the LCD scrolls repeatedly through a series of display screens.

1. To change the network settings from the default, press one of the navigation buttons.
The LCD immediately goes into input mode.
2. Use the navigation buttons to enter the IP address, netmask, and gateway for the LAN1 port.

You can disable LCD input functionality. To disable the LCD, refer to the *NIOS Administrator Guide*.

Console Port

The Infoblox appliance has a male DB-9 console port on the front panel. You can log in to the appliance through this port and specify initial network settings using the Infoblox CLI.

Note: Only a properly grounded USB-to-Serial dongle is allowed to connect to the serial console port. If the dongle is connected to a laptop, this laptop must be grounded properly as well. Failure to do so may result in damage to the serial console port of the Infoblox appliance. Infoblox is not responsible for such damage.

1. Connect a console cable from the console port of the management system to the console port of the Infoblox appliance.
2. Using a serial terminal emulation program such as Hilgraeve Hyperterminal® (provided with Windows® operating systems), launch a session. The connection settings are:
 - Bits per second: 9600
 - Data bits: 8
 - Parity: None
 - Stop bits: 1
 - Flow control: Xon/Xoff
3. Log in using the default user name and password *admin* and *infoblox*. User names and passwords are case-sensitive.
4. To change the network settings from the default, enter the `set network` command. Then enter information as prompted to change the IP address, netmask, and gateway for the LAN1 port.

```
Infoblox > set network
```

```
NOTICE: All HA configuration is performed from the GUI. This interface is used only to
configure a standalone node or to join a grid.
```

```
Enter IP address: LAN1 port IP address
```

```
Enter netmask: [Default: 255.255.255.0]: netmask
```

```
Enter gateway address [Default: n.n.n.1]: gateway IP address
```

```
Become grid member? (y or n): n
```

After you confirm your network settings, the appliance automatically restarts.

SPECIFYING APPLIANCE SETTINGS

When you make the initial HTTPS connection to the Infoblox appliance, you see the Setup Wizard, which guides you through the basic deployment of the appliance on your network.

You can deploy an appliance individually or in an HA (high availability) pair, for hardware redundancy. A single appliance or an HA pair without a Grid license runs independently from a grid. A grid is a group of two or more Infoblox appliances that share sections of a common, distributed, built-in database and which you configure and monitor through a single, secure point of access—the grid master. To set up a grid, you must configure a single or HA grid master and at least one grid member, which can also be a single appliance or an HA pair.

The following instructions guide you through the wizard and include worksheets where you can note your appliance and network settings. After you complete the wizard, you can set additional operational parameters and configure the appliance to provide services, such as DNS and DHCP. For detailed instructions on configuring the appliance, refer to the *NIOS Administrator Guide*.

1. Open an Internet browser window and enter **https://<IP address or hostname of your NIOS appliance>**.
2. Accept the certificate when prompted.

A certificate warning appears during the login process. This is normal because the NIOS appliance generates a self-signed certificate when it first starts, and your browser does not have a trusted CA certificate or a cached NIOS appliance server certificate (saved from an earlier connection) to authenticate the NIOS appliance certificate. Also, the hostname in the default certificate is `www.infoblox.com`, which is unlikely to match the hostname of your NIOS appliance. Consequently, messages appear warning that the certificate is not from a trusted certifying authority and that the hostname on the certificate is either invalid or does not match the name of the site that sent the certificate. Either accept the certificate just for this session or save it to the certificate store of your browser.

To eliminate the certificate warning, generate a new self-signed certificate or import a third-party certificate with a common name that matches the FQDN (fully-qualified domain name) of the appliance. This is a very simple process. For information about certificates, refer to the *NIOS Administrator Guide*.

3. Log in using the default user name and password *admin* and *infoblox*.

Note: User names and passwords are case-sensitive.

4. Read the Infoblox End-User License Agreement and click **I Accept** to proceed.
5. The Setup Wizard opens, and you can enter basic network and deployment settings.

Determine how you want to deploy the appliance, and then use the following worksheets to note the network settings that you want to enter on the wizard screens. If you are configuring an HA pair, you must configure each node individually.

Use the following worksheet when configuring a single independent appliance or grid member:

Settings	Enter your information here
Grid Name	
Shared Secret Host Name	
Grid Master's IP Address	
LAN1 Port IP Address and Netmask	
Gateway IP Address	
*Port Settings	
**Admin Password	
**Local Date, Time, and Time Zone	
or	
NTP Server IP Address	
* For grid member	
** For an independent appliance	

Use the following worksheet when configuring an independent HA pair:

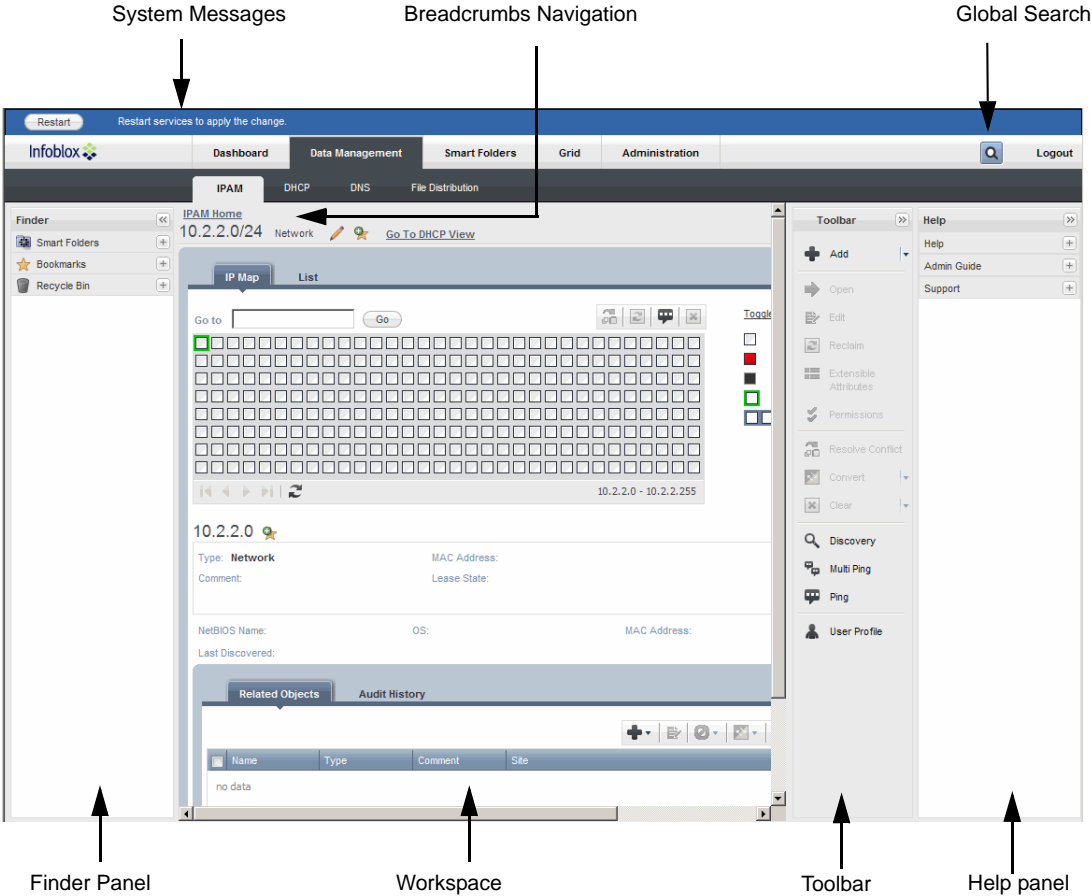
Settings	Enter your information here
System Name	
Shared Secret	
Host Name	
Virtual Router ID	
VIP (Virtual IP) Address and Netmask	
Node 1: HA Port IP Address	
Node 2: HA Port IP Address	
Node 1: LAN1 IP Address	
Node 2: LAN1 IP Address	
Gateway IP Address	
Admin Password	
Local Date, Time and Time Zone	
or	
NTP Server IP Address	

On the last screen of the wizard, click **Finish**. The Infoblox GUI application restarts. If you configured an HA pair, use the VIP address when you make an HTTPS connection to the HA pair.

INFOBLOX GUI

You can view data and configuration settings and make configuration changes through the Infoblox GUI. When an Infoblox appliance functions as an independent appliance, you launch System Manager to access the Infoblox GUI. When the appliance is in a grid, you log in to the grid master and launch Grid Manager.

Figure 1 Infoblox GUI Overview



INFOBLOX CLI

The Infoblox CLI allows you to configure and monitor the appliance using a small set of Infoblox commands. There are some tasks, such as resetting the appliance, that you can only do through the CLI. You can access the Infoblox CLI through a direct console connection from your management system to the Infoblox appliance. (For more information, see [Console Port](#) on page 16.) You can also enable remote console access—that is, SSHv2 (Secure Shell version 2) access—through the Infoblox GUI or CLI, and then access the CLI from a remote location using an SSHv2 client. (For more information, refer to the *NIOS Administrator Guide*.)

Using CLI Help

You can display a list of available CLI commands by typing `help` at the command prompt. For example:

```
Infoblox > help
?                Display help
delete           Delete files
dig              Perform a DNS lookup and print the results
exit            Exit command interpreter
help            Display help
ping            Send ICMP ECHO
quit            Exit command interpreter
reboot          Reboot device
reset           Reset system settings
set             Set current system settings
show            Show current system settings
shutdown        Shutdown device
traceroute      Route path diagnostic
ddns_add        Send DDNS update to add a record
ddns_delete     Send DDNS update to delete a record
rotate          Rotate files
```

To view an in-depth explanation of a CLI command and its syntax, type `help command` after the command prompt. For example:

```
Infoblox > help rotate
Synopsis:
rotate log [ syslog | debug | audit | ifmapserver ]
    rotate file groupname filename [ filename2, filename3, ...]
Description:
Rotates the specified log file, up to 10 previous.
    logfiles will be preserved
```

The two main groups of Infoblox CLI commands are `set` and `show`. To see the complete list of the `set` commands, enter `help set` after the command prompt. Likewise, to see a complete list of the `show` commands, enter `help show`. For information about the CLI commands, refer to the *Infoblox CLI Guide*